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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
10/058,645	01/28/2002	Anthony Walter Anson	105005-0055C1	5057

7590 10/12/2004

INTELLECTUAL PROPERTY DEPT.
DEWITT ROSS AND STEVENS
8000 EXCELSIOR DRIVE, 4TH FLOOR
MADISON, WI 53717-1914

EXAMINER

THALER, MICHAEL H

ART UNIT	PAPER NUMBER
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3731

DATE MAILED: 10/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/058,645

Applicant(s)

ANSON ET AL.

Examiner

Michael Thaler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-34, 36-43 and 46-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 39, 47-49 and 53-60 is/are allowed.
- 6) ☒ Claim(s) 24-29, 31-34, 36-38, 40, 41, 43, 46 and 50-52 is/are rejected.
- 7) ☒ Claim(s) 30 and 42 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 11, 2004 has been entered.

Claim 31 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In line 2, there is no antecedent basis for "said another anchor part".

Claims 24, 27-29, 31, 32 and 50-52 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Purdy (5,527,338). Purdy, in figures 1-2, disclose a stent which is expandable from a relatively straightened state (figure 1) to an occluding anchor part 12 (figure 2) having turns of cycloidal form which are substantially coplanar. Members 12, 14, 16a, 16b and 16c may be fused together (col. 6, lines 10-14) which makes the stent a single unitary length of wire. Alternatively, assuming *arguendo* that the stent is not a single unitary length of wire, Purdy

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teaches, in figure 4, that the stent may have only 2 (instead of three) connecting fibers 36a, 36b which are attached to the ends of each coil and teaches that by varying the number of fibers, an advantage can be obtained in that the behavior of the lead element 34 can be altered (col. 6, lines 34-44). It would have been obvious to provide only 2 connecting fibers attached to the ends of each coil in the figure 1-2 stent so that this embodiment too would have this advantage. With this modification, the stent would be a single unitary length of wire, extending from one end of element 14 to an end of a connecting fiber, through the connecting fiber to its opposite end, to one end of element 12, through element 12 to its opposite end, to one end of another connecting element, through the connecting fiber to its opposite end, to the other end of element 14 and through element 14. As to claim 27, Purdy discloses another anchor part 14 and linking part (one of the connecting fibers). As to claim 28, the "another anchor part" 14 has a series of turns (the windings of the spiral) extending laterally relative to the linking part. As to claims 31 and 51, the wire turns of the "another anchor part" 14 have a spiral form. As to claim 32, note col. 7, lines 22-31. As to claim 50, Purdy discloses catheter 2, placement member (the guide wire described in col. 6, line 47-48) and releasable connection means

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(col. 6, lines 50-51). As to claim 52, the occluding anchor part 12 (figure 2) is at a terminal end of the stent.

Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purdy (5,527,338) in view of Mazzocchi et al. (2002/0138095). Purdy fails to disclose the wire being formed of superelastic shape memory material which self-expands above a trigger temperature. However, Mazzocchi et al. teach that an occluding wire should be formed of such a material (paragraphs [0039-0041]) apparently in order to obtain the advantage of insuring automatic expansion when desired. It would have been obvious to use this material for the Purdy wire occluder so that it too would have this advantage.

Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purdy (5,527,338). As to claim 33, Purdy fails to disclose the specific coating of a protein. However, it was well known in this art that proteins are used as pharmacological agents. Using a protein as pharmacological agent of Purdy would have been obvious for this reason. As to claim 34, Mazzocchi et al. fail to disclose a roughened surface on the wire. However, it is old and well known in this art that implanted articles in the body may have roughened surfaces in order to better retain pharmacological agents on them. Using a roughened surface on the wire of Purdy would have been obvious

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so that it too would have this advantage. The above well known in the art statements are taken to be admitted prior art because applicant failed to traverse the examiner's assertions (M.P.E.P. 2144.03).

Claims 36-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Tydings (4,352,542). Tydings discloses a releasable connector 10 for releasably connecting first and second parts 11, 12, comprising a first connector region (the left half of connector 10 as seen in figure 1, for example) which has a shape memory effect (col. 2 line 41 to col. 3, line 9) and a second connector region (the right half of connector 10), the first and second connector regions separate from but adapted to be secured to the first and second parts 11, 12. As to claim 37 and 38, the Tydings connector regions are bush parts. As to claim 38, the Tydings second connector region is inherently capable of receiving and holding a second part when the first connector region is in both of its first and second states. For example, the second connector region could be cooled while the first connector region is heated so that the second connector region maintains its hold on the second part while the first connector region releases the first part.

Claims 40, 41, 43 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purdy (5,527,338) in view of

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Kamiya et al. (5,192,301). Purdy fails to disclose the releasable connector (col. 6, lines 50-51) being formed of temperature triggered shape memory material. However, Kamiya et al. teach that a connector, between the push rod and an implantable occlusion device should be formed of this material so that it can be easily disconnected when it reaches a certain temperature (col. 8, lines 45-55). It would have been obvious to so form the Purdy connector so that it too has this advantage. Note that Kamiya et al., in figure 29, show a releasable connector (the right portion of plug 21'' including the thin neck at the end of the lead line for reference numeral 21'') for releasably interconnecting first part 23 to second part (the bulbous portion of plug 21'' left of the thin neck) comprising first connector region (the flange portion which is wrapped around ball shaped member 28) which has a shape memory effect (col. 8, lines 52-55) and second connector region (the thin neck). Note also that the Kamiya second connector region is "separate from" the second part. Dictionary.com defines "separate" as "Dissimilar from all others; distinct" and "individual and distinct". The Kamiya second connector region is dissimilar in size and shape to the second part and is thus distinct and separate therefrom. As to claim 41, Webster's II New Riverside Dictionary defines "bush" as "To furnish or line

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with a bushing." and defines "bushing" as "A fixed or removable lining used to constrain, guide or reduce friction." The Kamiya et al. flange portion which is wrapped around ball shaped member 28 is used to constrain and thus meets this broad definition to the same extent that member 30 of the application meets it.

Claims 30 and 42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 39, 47-49 and 53-60 are allowed.

Applicant's arguments filed August 11, 2004 have been fully considered but they are not persuasive for the reasons set forth above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Thaler whose telephone number is (703) 308-2981. The examiner can normally be reached Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on (703)308-2154. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0858.

mht
10/7/04



MICHAEL THALER
PRIMARY EXAMINER
ART UNIT 3731